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SHARP KABUSHIKI KAISHA
C/O KEATING & BENNETT, LLP
1800 Alexander Bell Drive
SUITE 200
Reston, VA 20191

EXAMINER

RUSHING, MARK S

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uspto@kbiplaw.com
pmedley@kbiplaw.com



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/598,098
Filing Date: August 17, 2006
Appellant(s): YAMAMOTO ET AL.

Erik Preston
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/1/10 appealing from the Office action mailed 3/31/10.

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(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 34-46

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW

GROUND OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

06-195056	Nakamura	07-1994
6,477,464	McCarthy et al.	11-2002
7,126,583	Breed	10-2006
5,757,268	Toffolo et al.	05-1998
2005/0280524	Boone et al.	12-2005
5,731,979	Yano et al.	03-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 34, 35, 36, 40, 41, 42, 43, 44, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (Nakamura; JP-A-H06-195056) in view of McCarthy et al. (McCarthy; US 6,477,464).

Regarding Claim 34, Nakamura discloses an onboard display device, comprising: a display section attached to an instrument panel of a vehicle (Abstract, [0006]-[0009]), said display section being greater in width than in height ([0010]), the aspect ratio being a width/height ratio of a display area of the display section, said display section including a first

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part in which a secondary image including information other than information of the vehicle is displayed ([0008], [0013], [0014], Fig 10b, A1), and a second part in which vehicle condition image including information of the vehicle are displayed ([0009], [0015], Fig 10b, A3); and a display control section controlling individual manners in which the display section shows the secondary image and the vehicle condition images ([0020], [0021], [0027], [0040]), under control of said display control section, when the secondary image is displayed at an increased scale, the secondary image appears partly on a part of a display area for the vehicle condition images (from Fig 4d to Fig 5b), and the vehicle condition images are displayed in a different manner (*there are many embodiments where the vehicle condition image is in a different manner, demonstrating the capability of the system*).

The description in the specification allows for changes in the display that are suitable to a driver. It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable state.

While the reference doesn't expressly teach an aspect ratio that is equal to or greater than 7:3, it does suggest ratios bigger than 4:3 including 16:9 ([0010]) and doesn't limit itself to that size ([0052]).

In the same field of endeavor, McCarthy discloses a mirror-based global-positioning system (GPS) navigation system on a vehicle. The interior rearview mirror assembly further includes a scrolling display. The scrolling display displays scrolling driver informational messages on the scrolling display. The interior rearview mirror assembly may include a global-positioning system display receiving an output from a global-positioning system receiving

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system and displaying turn-by-turn information to a vehicle driver. The reference teaches the use of a GPS with a display having an aspect ratio greater than or equal to 3 (Col 7 Lines 55-64).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura with McCarthy as a matter of design choice using readily available components as an alternative embodiment.

Regarding Claim 35, Nakamura discloses an onboard display device, wherein displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images that can change the image from a circular-shape to a column-shape (*From Fig 4h to Fig 5b*).

While the reference doesn't expressly teach changing a speedometer reading from circular-shape to a column-shape, both are displayed in Fig 4h. The description in the specification allows for changes in the display that are suitable to a driver ([0040]). It would have been obvious to one of ordinary skill in the art at the time the invention was made given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable display.

Regarding Claim 36, Nakamura discloses an onboard display device, wherein displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images that can change the image from a circular-shape to numbers (*From Fig 4h to Fig 5b*).

While the reference doesn't expressly teach changing a speedometer reading from circular-shape to numbers, both are displayed in Fig 4h. The description in the specification allows for changes in the display that are suitable to a driver ([0040]). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made given the controlling means for the image ([0021]) and the motivation of improving visibility (Abstract, [0035]) to have the capability to alter the image to a preferable display.

Regarding Claim 40, Nakamura discloses an onboard display device, wherein said display control section fixes one of vertical display lines of the secondary image at a left-hand side and a right-hand side of the secondary image and moves a vertical display line at an unfixed side so as to scale up the secondary image (*to go from the two images in 4d to the images in 5b there is a vertical line on the left that remains fixed and one on the right of the television image that changes so that the secondary image is scaled up*).

The description in the specification allows for changes in the display that are suitable to a driver. It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable state.

Regarding Claim 41, Nakamura discloses an onboard display device, wherein the vehicle condition images include at least an image of a speed of the vehicle ([0009]), and an image of an amount of fuel ([0009]), and the secondary image includes at least a navigation image ([0013]), a camera image ([0008]), and an image of information useful for a driver or a passenger ([0015]). However, the reference doesn't specify an image of the gear shift.

Paragraph [0015] suggests numerous vehicle conditions being displayed on an image, a gear shift indicator is a common reading on vehicle displays. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the device adding an image of a gear shift.

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Regarding Claim 42, Nakamura discloses an onboard display system, comprising: an onboard display device; an imaging device taking images to and near the front, rear, right, and left of the vehicle ([0008], [0015]); and a control device controlling imaging operation of the imaging device so that a front image, a rear image, a right-hand image, and a left-hand image ([0021], [0040]) taken by the imaging device are capable of being all simultaneously shown on the display section of the onboard display device ([0035]).

Regarding Claim 43, Nakamura discloses an onboard display system, comprising: an onboard display device; an imaging device taking an image to and near the rear of the vehicle ([0008], [0035], [0041]); and a display control device of which the onboard display device is under control ([0021], [0040]), shows a widthwise elongated image to and near the rear of the vehicle as taken by the imaging device at an aspect ratio more than or equal to 4:3 ([0010]). However, the reference doesn't specify upon a selection of a reverse gear selected to back the vehicle, showing a widthwise elongated image.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the device so that upon a selection of a reverse gear selected to back the vehicle, showing a widthwise elongated image, in order to guard against running into unseen objects behind the vehicle. Since a driver often needs assistance to see behind the vehicle it would be a desirable function, because the field of vision is hindered to the rear of a car.

The limitation concerning a ratio greater than 7:3 is addressed with regard to Claim 34.

Regarding Claim 44, Nakamura discloses an onboard display system, wherein under control of the control device, the imaging device operates in response to an ignition-induced start-up of an engine, so that a front image, a rear image, a right-hand image, and a left-hand

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image are capable of being all simultaneously shown on the display section ([0008], [0015], and [0035]). However, the reference doesn't specify the imaging device operates in response to an ignition-induced start-up of an engine.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the imaging device operating in response to an ignition-induced start-up of an engine, as often when a driver first enters a vehicle he usually has a concern for avoiding obstacles surrounding the car.

Regarding Claim 45, Nakamura discloses a vehicle comprising an onboard display device (Abstract, [0006]-[0009]).

Regarding Claim 46, Nakamura discloses a vehicle comprising an onboard display system (Abstract, [0006]-[0009]).

2. Claims 37, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of McCarthy and further in view of Breed (US 7,126,583).

Regarding Claim 37, Nakamura doesn't disclose an onboard display device, wherein the display section includes 468 or more lines as pixel rows.

In the same field of endeavor, Breed discloses an interactive display system for a vehicle including a heads up display system for projecting text and/or graphics into a field of view of a forward-facing occupant of the vehicle and an occupant-controllable device enabling the occupant to interact with the heads up display system to change the text and/or graphics projected by the heads up display system or direct another vehicular system to perform an operation. The device may be a touch pad. A processor and associated electrical architecture are

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provided for correlating a location on the touch pad which has been touched by the occupant to the projected text and/or graphics.

The reference discloses an onboard display device, wherein the display section includes 468 or more lines as pixel rows (Col 13 Lines 34-48).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura and McCarthy with Breed as optimal resolution is a desirable option, granting significant advantages over other systems particularly in the resolution and optical intensity areas as suggested by Breed (Col 13 Lines 39-40).

Regarding Claim 38, Nakamura doesn't disclose an onboard display device, wherein the display section includes 1092 or more lines as pixel columns.

Breed discloses a display device, wherein the display section includes 600 pixels per column (Col 13 Lines 34-48).

Although the reference teaches 600 pixels per column, it is in the context that the more pixels in the column the more advantageous the image is to a driver. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura and McCarthy with Breed as optimal resolution is a desirable option, granting significant advantages over other systems particularly in the resolution and optical intensity areas as suggested by Breed (Col 13 Lines 39-40).

No evidence presented is convincing that the particular configuration of the display is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing a clear display for Nakamura. See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459.

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Regarding Claim 39, Nakamura doesn't disclose an onboard display device, wherein the display section includes 468 or more lines as pixel rows and 1092 or more lines as pixel columns.

The limitation concerning number of pixels in rows and columns is addressed with regard to Claims 37 and 38.

(10) Response to Argument

Appellant's arguments filed 11/3/09 have been fully considered but they are not persuasive for the following reasons:

Arguments:

- a. Applicant's claim 34 recites the feature of "under control of said display control section, when the secondary image is displayed at an increased scale, the secondary image appears partly on a part of a display area for the vehicle condition images, and the vehicle condition images are displayed in a different manner."
- b. If the vehicle condition images are displayed at reduced size while a meter corresponding to one of the vehicle condition images is shaped as a circle, a visibility of the vehicle condition images will be decreased so that driving safety will be impaired.
- c. Contrary to the Examiner's allegations, when the images on the display of Nakamura et al. are changed from the arrangement of Fig. 4d to the arrangement of Fig. 5b, the images are not displayed in a different manner. Rather, Nakamura et al. merely teaches that different display portions of the display can be resized or replaced with other display portions that show other information.

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d. Applicant's invention causes the display device to change the display manner of one type of information when the scale of an image of another type of information is increased.

Accordingly, Nakamura et al. clearly fails to teach the vehicle condition images are displayed in a different manner" as recited in Applicant's claim 34. McCarthy et al. clearly does not teach the vehicle condition images are displayed in a different manner" as recited in Applicant's claim 34.

Responses:

a. This limitation is addressed with regard to Claim 35. "While the reference doesn't expressly teach changing a speedometer reading from circular-shape to a column-shape, both are displayed in Fig 4h. The description in the specification allows for changes in the display that are suitable to a driver ([0040]). It would have been obvious to one of ordinary skill in the art at the time the invention was made given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable display."

b. In paragraphs [0035] and [0040], Nakamura describes setting the display to a user's choice and enhancing driver safety. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

c. Nakamura [0027] teaches changing the manner in which information is displayed ("the user can specify the number of split areas, positions of areas, and images to display in these areas, switch the areas between left and right, and so forth").

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d. Appellant interprets “different manner” according to descriptions found within the specification, but the claim language must distinguish itself from the prior art. The examiner is responsible to read the claims in view of the specification, but must also give the claims their broadest reasonable interpretation. “Manner” is defined as a way of doing, being done, or happening; or as a mode of action, occurrence. Nakamura’s resizing a graphic, reads on a different manner. McCarthy is not relied upon for displaying images in a different manner.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Mark S. Rushing/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612

/BENJAMIN C. LEE/
Supervisory Patent Examiner, Art Unit 2612